

AMENDMENTS TO THE DRAWINGS

The attached sheets of drawings include changes to Figs. 10, 15, 17, 20, 24, 25, 27, 28, 40, 41, 55, 66, 67, 68, and 76. In Figs. 10, 15, 17, 20, 24, 25, 27, 28, 40, 41, 55, 66, 67, 68, and 76, typographical errors have been corrected.

Attachment: Replacement Sheets

Annotated Sheets Showing Changes

REMARKS

Applicants respectfully request entry and consideration of the amendments. If there are any issues that can be resolved via a telephone conference, the Examiner is invited to contact the undersigned at 404/685-6799.

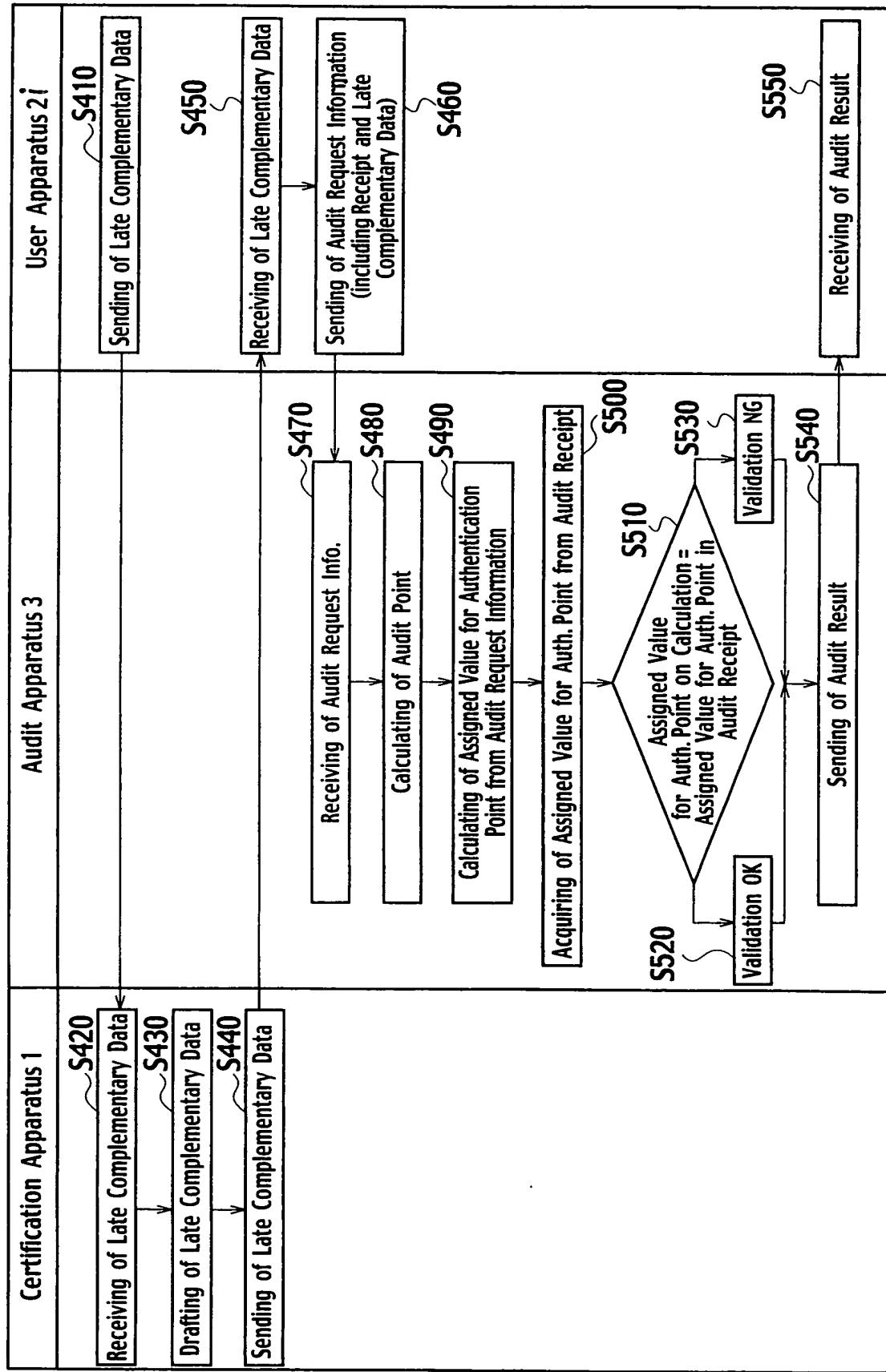
Respectfully submitted,



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FIG. 10



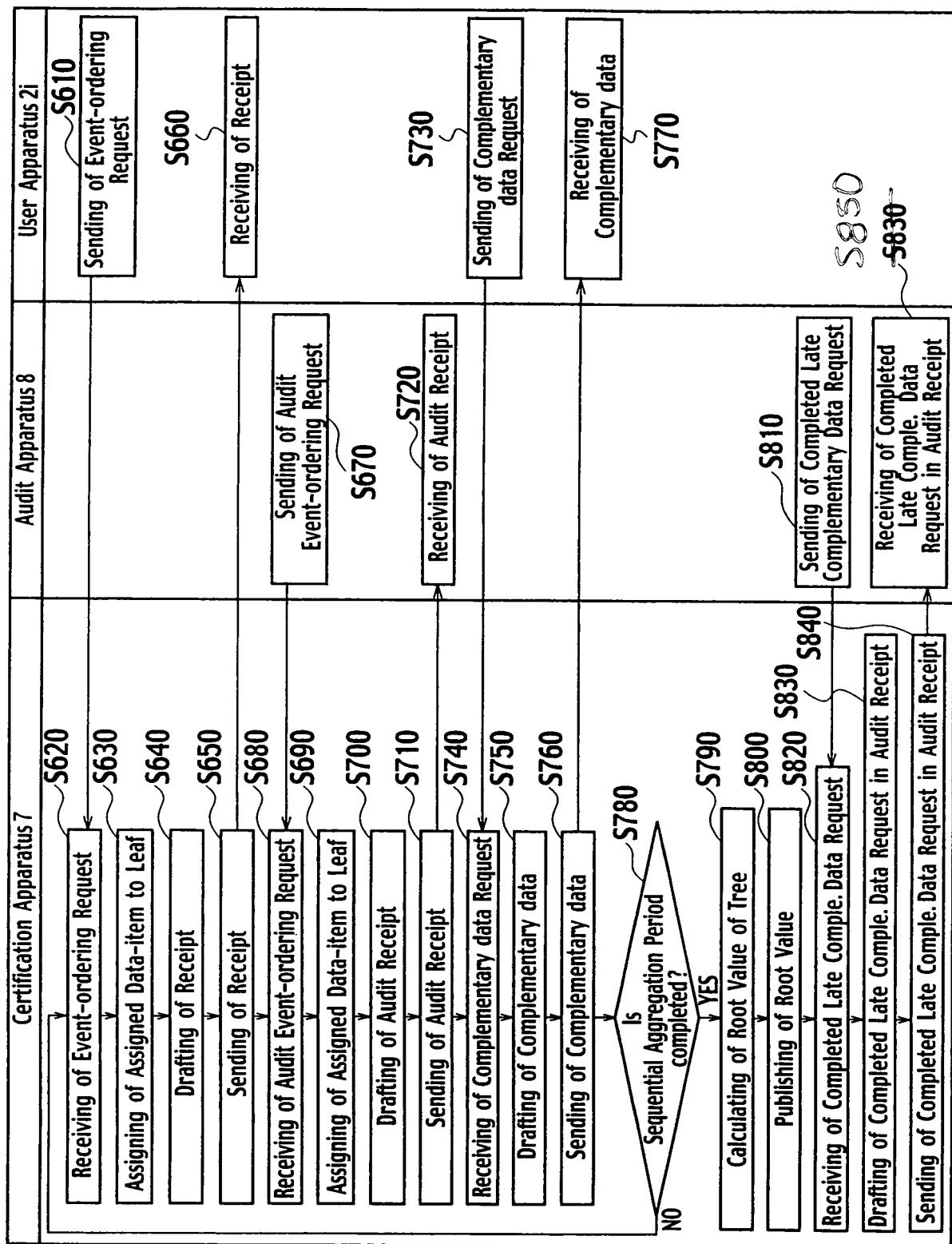
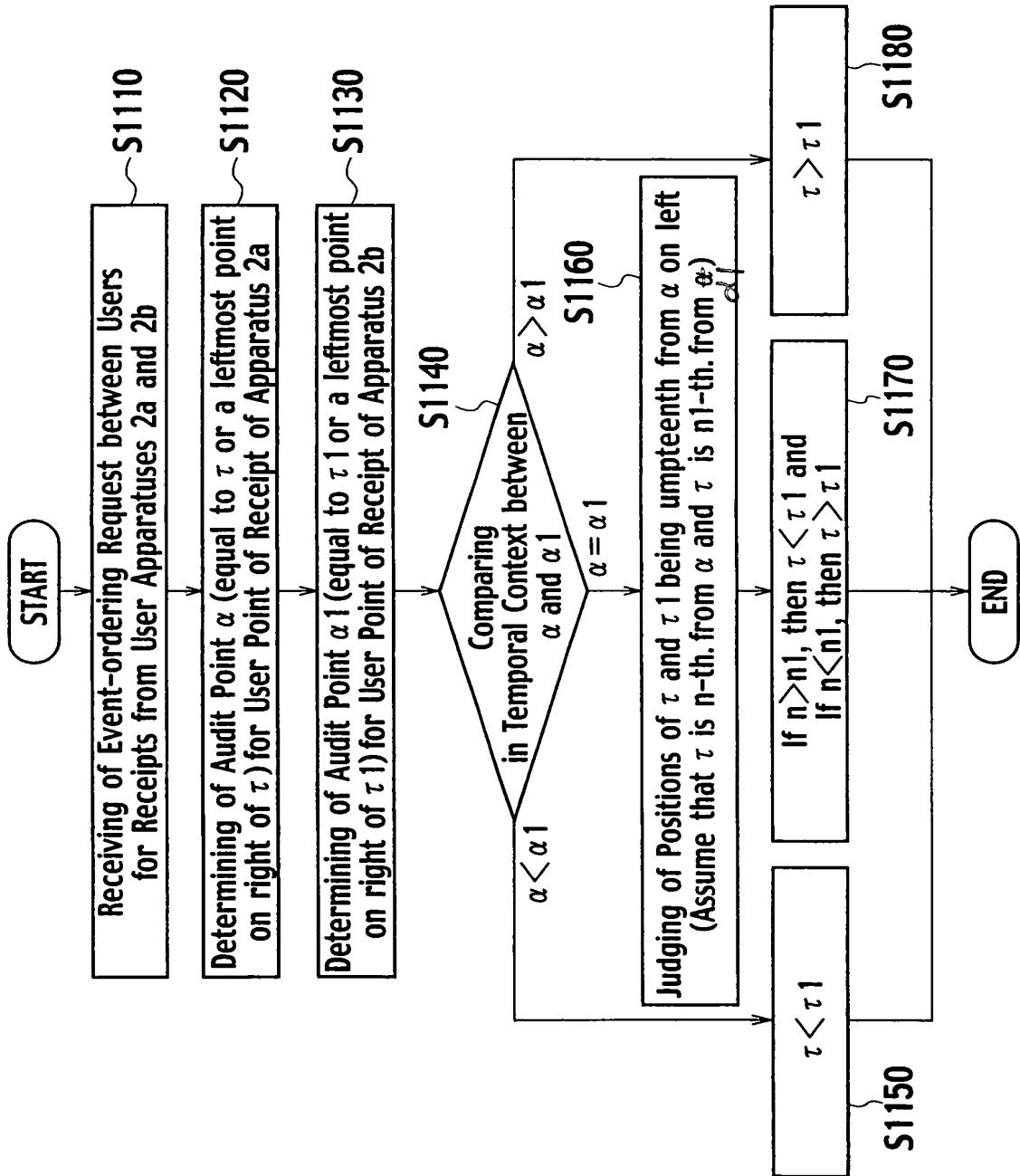


FIG. 15

FIG. 17



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FIG. 19

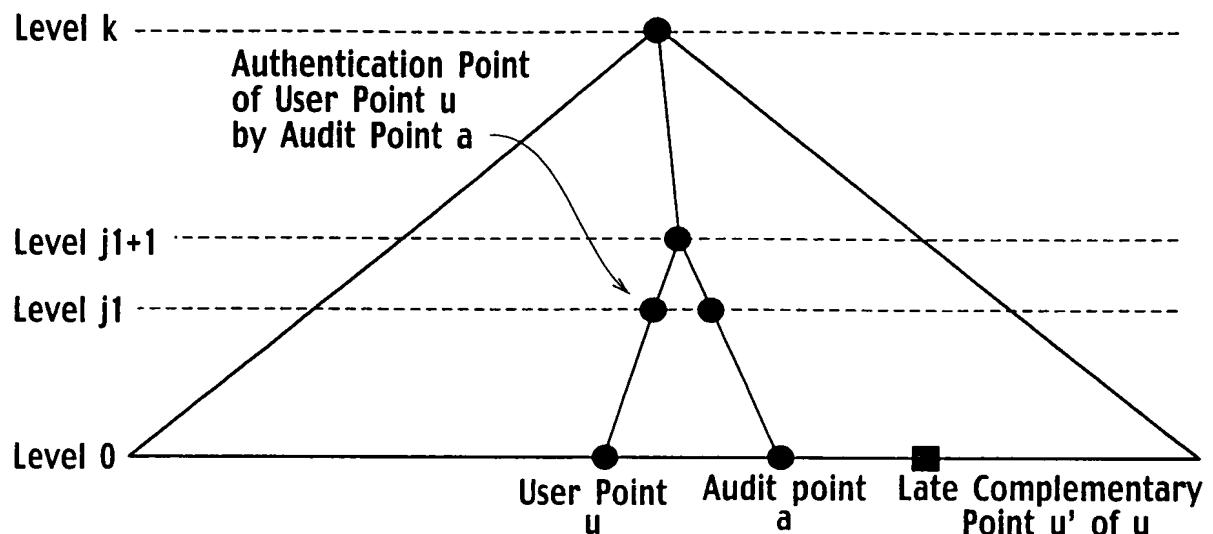


FIG. 20

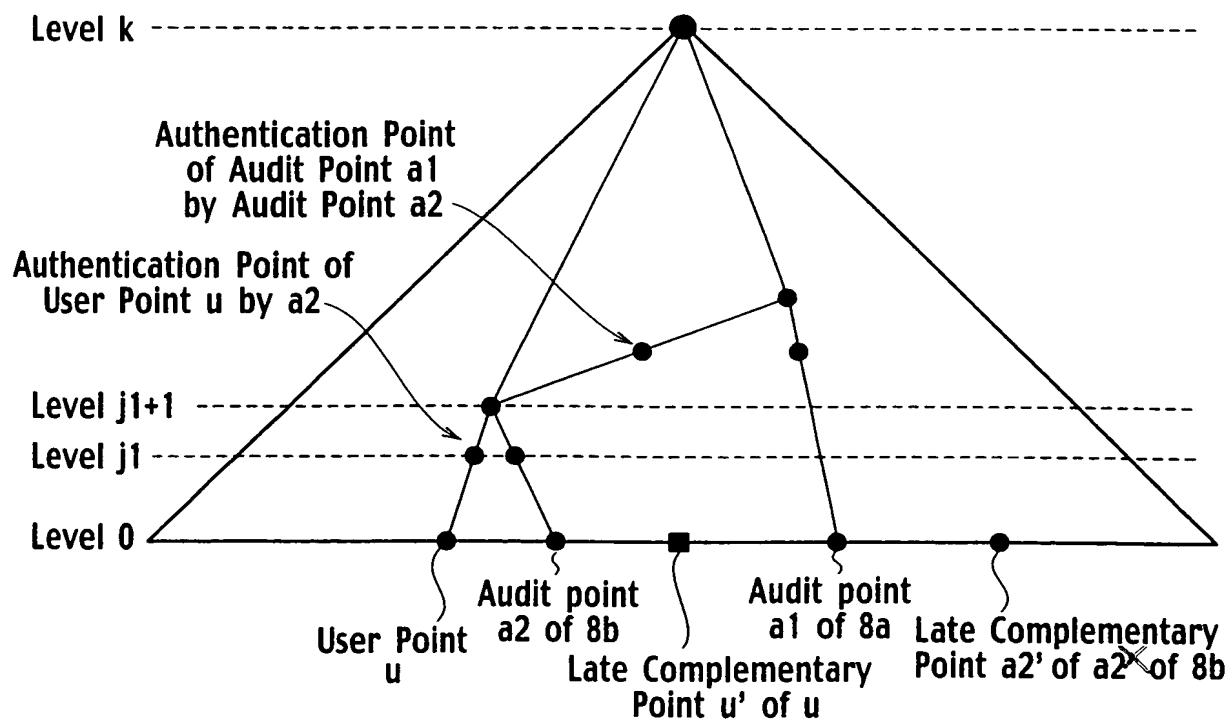
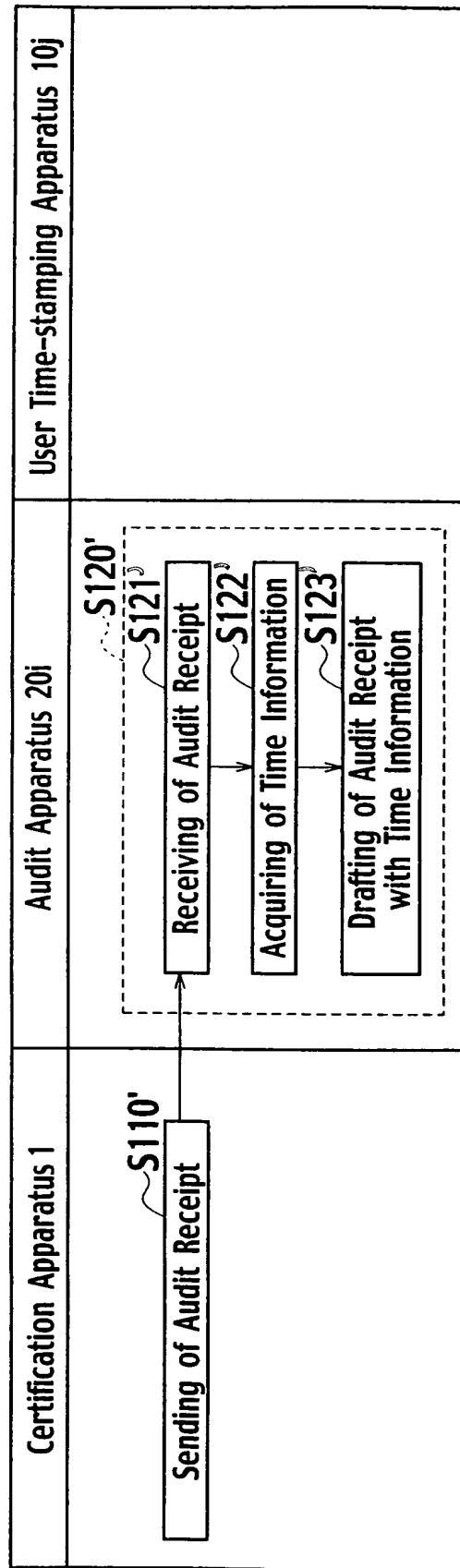


FIG. 24



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FIG. 25

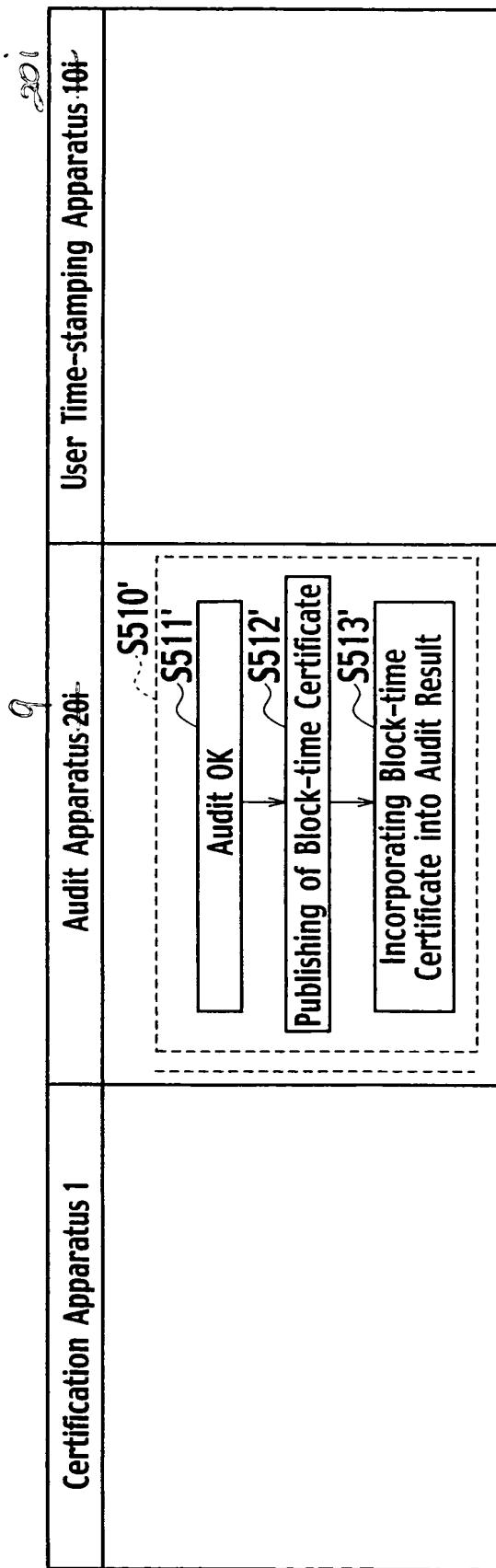


FIG. 27

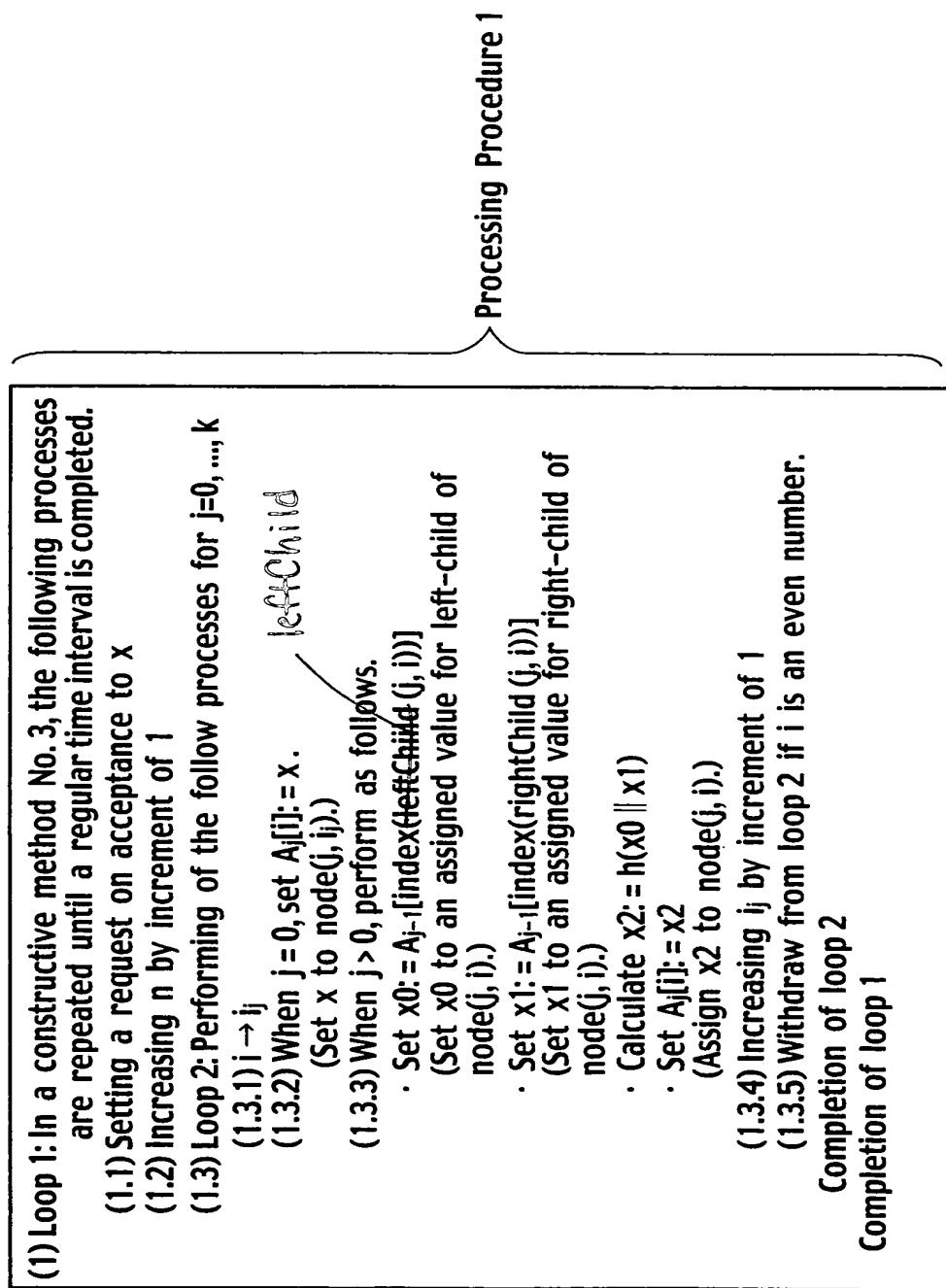


FIG. 28

- (2) Performing of the following processes after withdrawing from loop 1 on reaching finish time.
- (2.1) Set $k := \text{ceiling}(\log_2(n))$.
 - (2.2) Calculate $\text{rtPath}(k, 0, n-1)$ and Set $((0, r(0), \dots, k, r(k)))$ to the calculation result.
 - (2.3) Loop 3: Performing of the follow processes for $j=0, \dots, k$
 - (2.3.1) $i \rightarrow i_j$
 - (2.3.2) Case of $j = 0$:
 - (2.3.2.1) When i is an odd number:
 - Produce a dummy $r := R(0, i)$
 - Set $A_{j[i]} := r$
(Assign r to node($0, i$).)
 - Set $b_j := \text{true}$.
 - Increase i_j by increment of 1.
 - (2.3.2.2) Case of $0 < j \leq k$:
 - (2.3.2.1) When $i = r(j)$:
 - (when node(j, i) is on $\text{rtPath}(k, 0, n-1)$):
 - (2.3.2.1.1) $x_0 := A_{j-1}[\text{index}(\text{leftChild } (j, i))]$
• (Set x_0 to an assigned value for left-child of node(j, i).)
 - (2.3.2.1.2) $x_1 := A_{j-1}[\text{index}(\text{rightChild } (j, i))]$
• (Set x_1 to an assigned value for right-child of node(j, i).)
 - (2.3.2.1.3) Calculate $x_2 := h(x_0 \parallel x_1)$
 - (2.3.2.1.4) Set $A_{j[i]} := x_2$
• (Assign x_2 to node(j, i).)
 - (2.3.2.1.5) When i is an even number and $j < k$:
 - Increase i by increment of 1.
 - Calculate $r := R(j, i)$ and Set $A_{j[i]} := r$
(Assign r to node(j, i).)
 - Set $b_j := \text{true}$.
 - Set $i_j := i + 1$
 - (2.3.2.2) When $i = r(j) + 1$, an odd number and $j < k$:
 - Calculate $r := R(j, i)$ and Set $A_{j[i]} := r$
(Assign r to node(j, i).)
 - Set $b_j := \text{true}$.
 - Increase i_j by increment of 1.

Completion of loop 3

FIG. 40

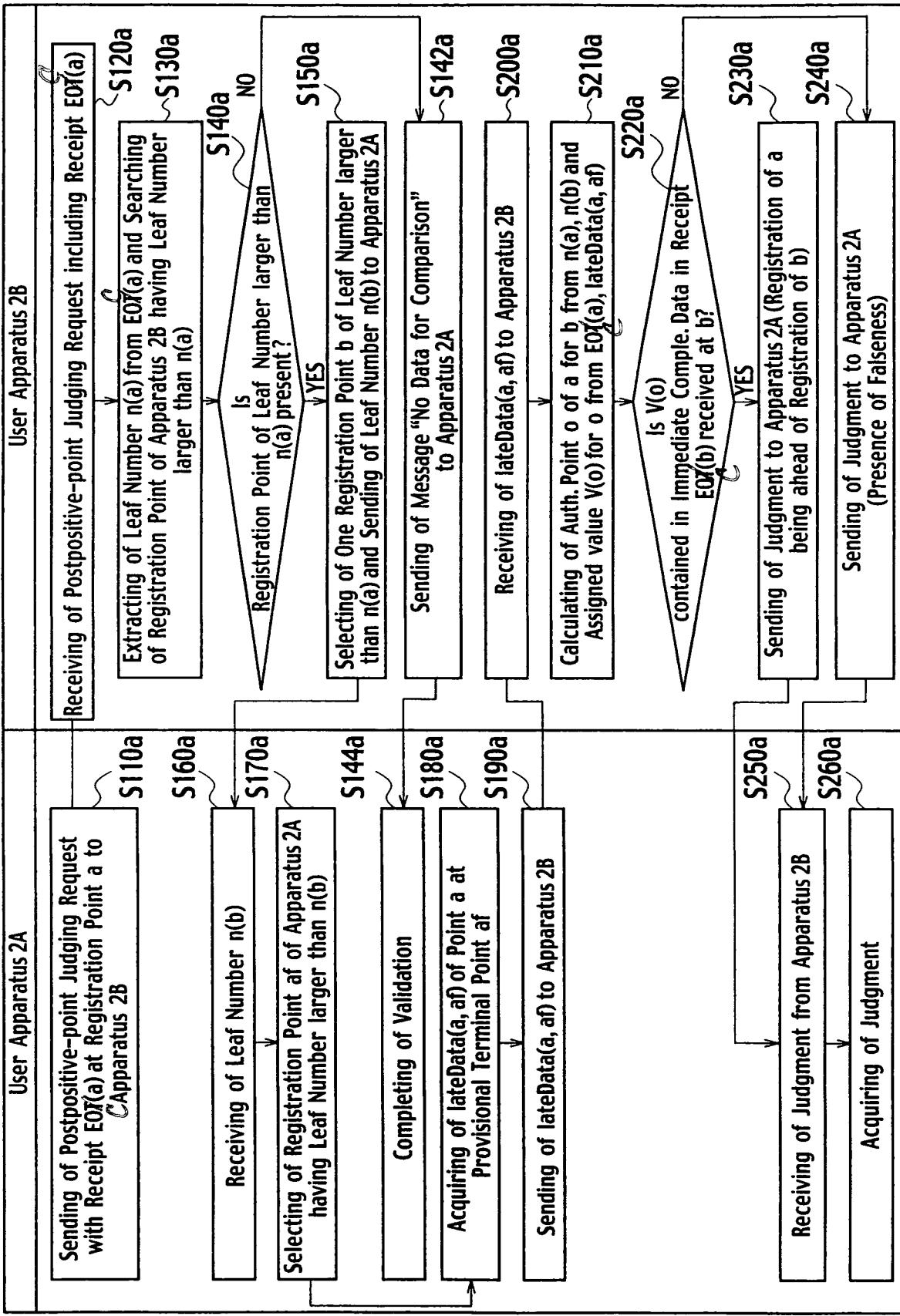
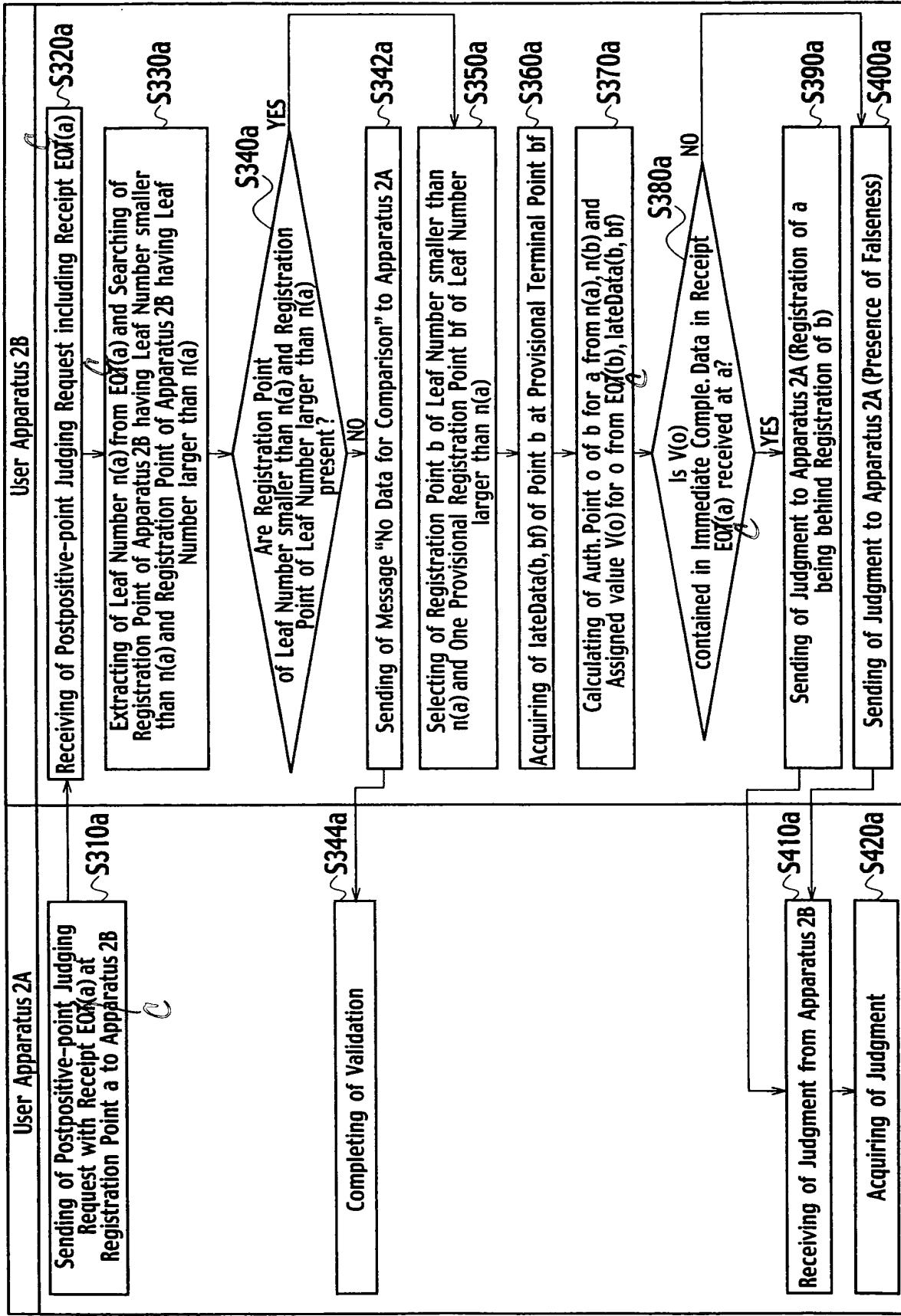
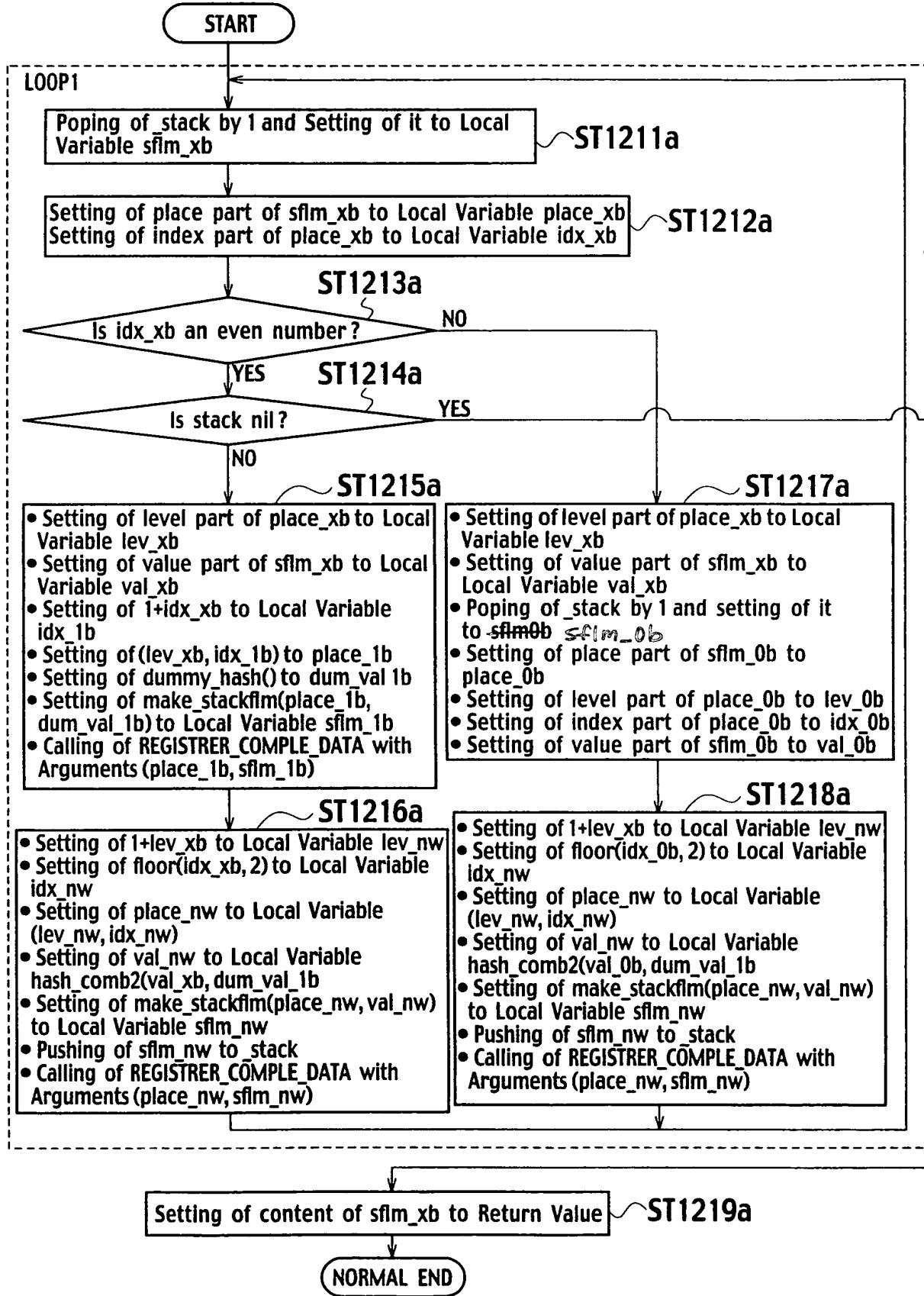


FIG. 41



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FIG. 55



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FIG. 66

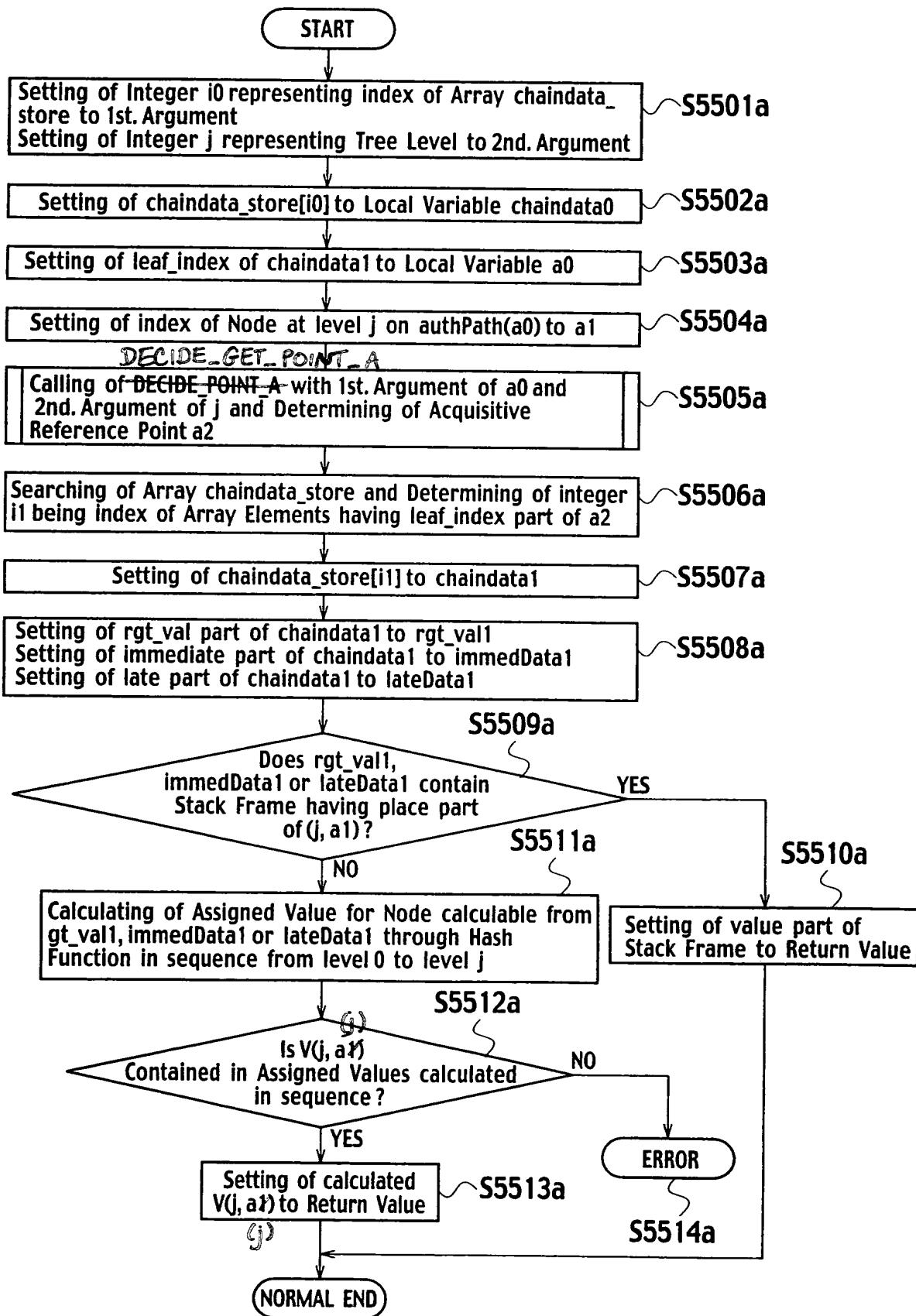
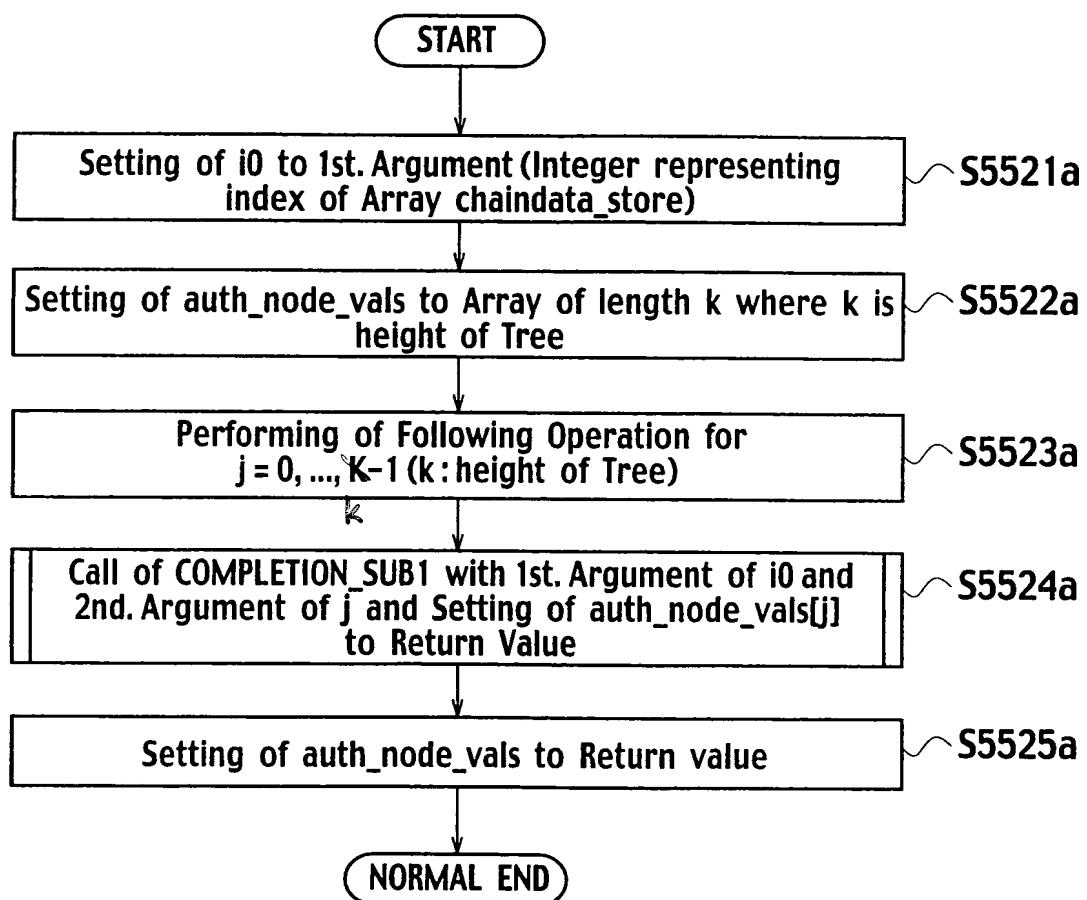
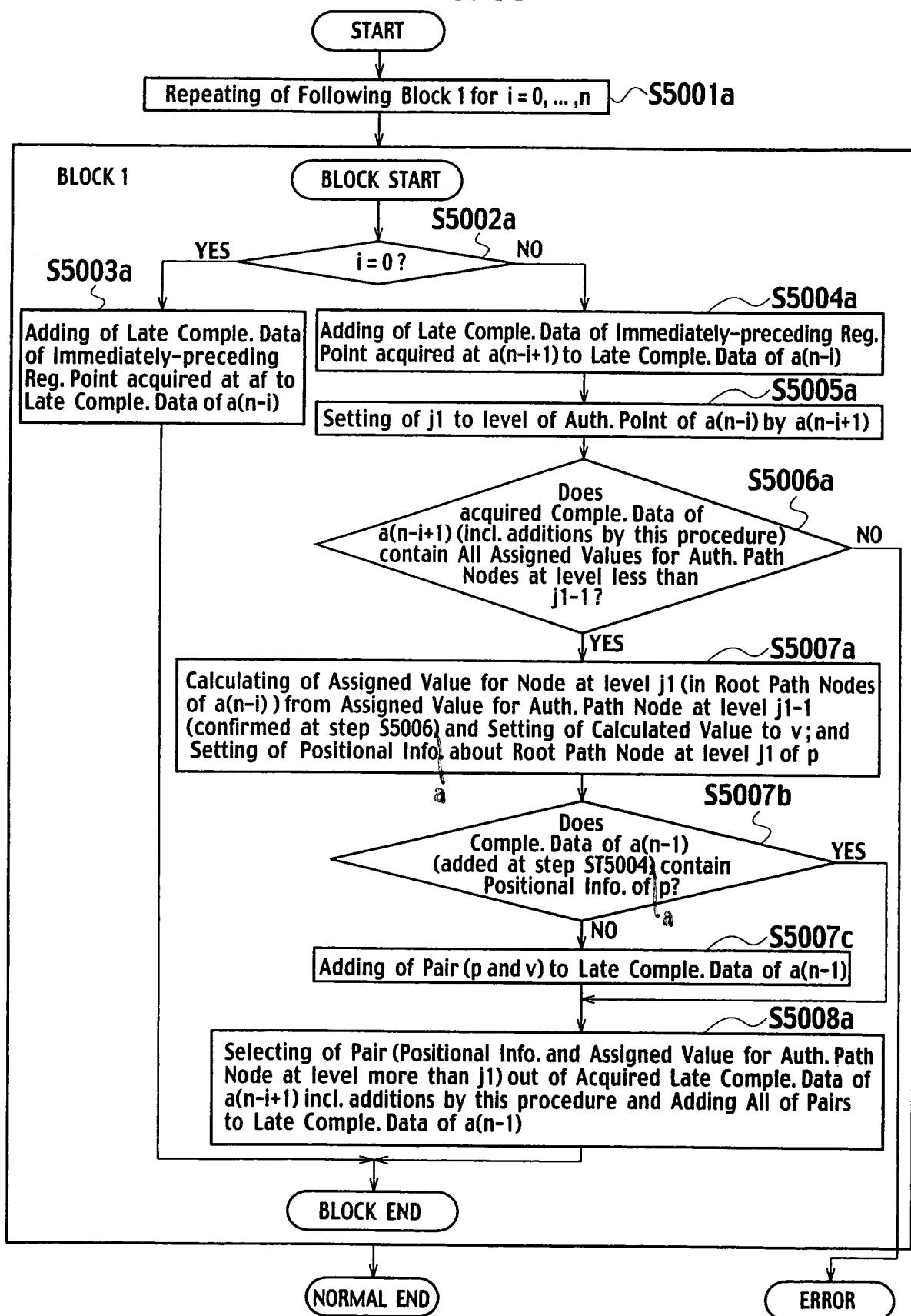


FIG. 67



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FIG. 68



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FIG. 76

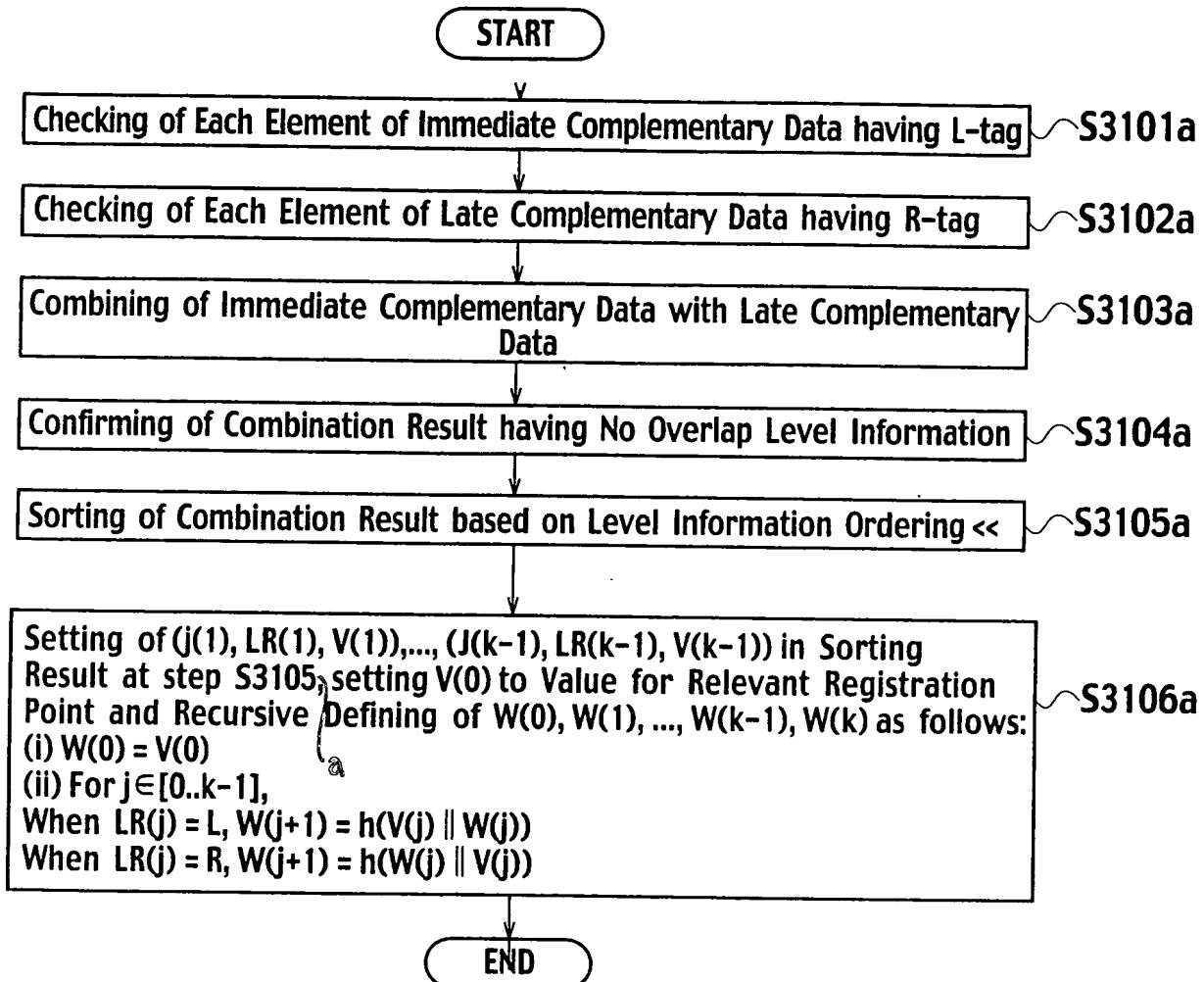


FIG. 77

